

MULTI-STAGE CODE GENERATOR AND DECODER FOR COMMUNICATION SYSTEMS

ABSTRACT OF THE DISCLOSURE

A method of encoding data for transmission from a source to a destination over a communications channel is provided. A plurality of redundant symbols are generated from an ordered set of input symbols to be transmitted. A plurality of output symbols are generated from a combined set of symbols including the input symbols and the redundant symbols, wherein the number of possible output symbols is much larger than the number of symbols in the combined set of symbols, wherein at least one output symbol is generated from more than one symbol in the combined set of symbols and from less than all of the symbols in the combined set of symbols, and such that the ordered set of input symbols can be regenerated to a desired degree of accuracy from any predetermined number, N , of the output symbols.

SF 1303281 v1